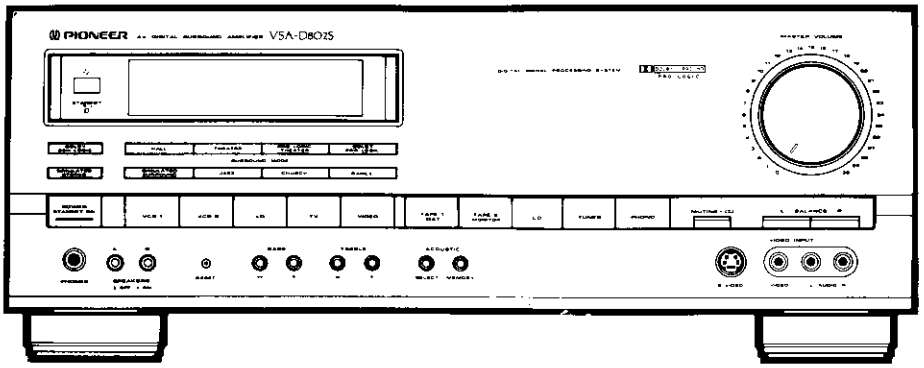
No1

Operating Instructions

AV DIGITAL SURROUND AMPLIFIER

VSA-D802S

HB



Thank you for buying this Pioneer product.
Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.
In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings. However, the method of connecting and operating the unit is the same.

承認・否承認

パイオニア㈱ 大衡工場
品質保証部 技術資料課
平成 5年 3月 17日

承認	照査	担当

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

"This product complies with the Radio Interference requirements of the EC (European Community) Directive 87/308/EEC."

IMPORTANT

The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

PIONEER®
The Art of Entertainment

IMPORTANT

FOR USE IN THE UNITED KINGDOM

The wires in this mains lead are coloured in accordance with the following code:

blue neutral
brown live

If the plug provided is unsuitable for your socket outlets, the plug must be cut off and a suitable plug fitted.

The cut-off plug should be disposed of and must not be inserted into any 13 amp socket as this can result in electric shock. The plug or adaptor or the distribution panel should be provided with 13 amp fuse. As the colours of the wires in the mains lead of this appliance may not correspond with coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

Do not connect either wire to the earth terminal of a three pin plug.

NOTE

After replacing or changing a fuse, the fuse cover in the plug must be replaced with a fuse cover which corresponds to the colour of the insert in the base of the plug or the word that is embossed on the base of the plug, and the appliance must not be used without a fuse cover. If lost, replacement fuse covers can be obtained from your dealer.

This appliance is rated at 13 amps.

Only 13 amp fuses approved to B.S. 1362 A.S.T.A. should be used.

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FEATURES

The VSA-D802S combines the functions of amplifier wireless remote control, audio-visual selector and surround processor. It will play a central role in your enjoyment of audio-video media.

- **DOLBY PRO LOGIC SURROUND performed by a Digital Signal Processor (DSP).**

- **DSP provides five Sound Field Control (SFC) simulated surround settings.**

- **LARGE, MOTOR-DRIVEN VOLUME KNOB**

The large volume knob contributes to operational convenience and positive response. You can even operate it via remote control. When you change the volume setting using the remote control unit, the knob turns by itself, making it easy to keep track of the current setting.

- **VIDEO SIGNAL SELECTOR (Simulcast function)**

Allows free combination of various audio-visual sources during playback and over-dubbing, enabling you to produce your own original video product.

- **TWO-WAY VCR COPYING AND MONITORING**

VCR 1 — VCR 2: Copying of video cassette tapes can be performed in either direction.

- **ACOUSTIC MEMORY FUNCTION**

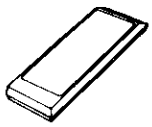
Five types (A—E) of tone control settings can be preset. The settings for loudness and flat tone response functions can also be selected quickly.

- **90/60/30-MINUTE SLEEP TIMER FUNCTION**

- **AV PROGRAMMABLE REMOTE CONTROL UNIT**

With the attached programmable remote control unit, you can operate any Pioneer audio or video component bearing the SR mark. If you use the LEARN function, remote commands of components not bearing the SR mark can be memorized, giving you remote control over a component's functions.
You can also use the MULTI-COMMAND to memorize up to seven commands in order, letting you transmit them at the push of a single button.

ACCESSORY ITEMS



Audio/Video programmable remote control unit

Alkaline dry cell batteries (size "AA" (LR6/AM-3))

INSTALLATION

LOCATION

Install the amplifier in a well-ventilated location where it will not be exposed to high temperature or humidity.

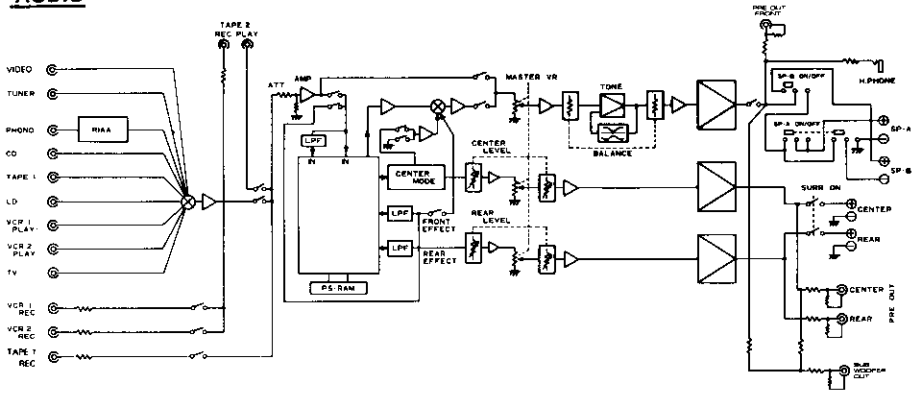
Do not install the amplifier in a location which is exposed to direct sunlight, or near hot appliances or radiators. Excessive heat can adversely affect the cabinet and internal components, and may also result in a malfunction or an accident. (Avoid installation near cookers, etc., where the unit may be exposed to smoke from oil, steam, or heat.)

CONDENSATION

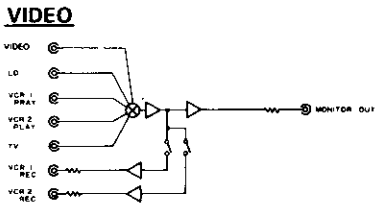
When this unit is brought into a warm room from previously cold surroundings or when the room temperature rises sharply, condensation may form inside, and the unit may not be able to attain its full performance. In this case, allow the unit to stand for about an hour or raise the room temperature gradually.

BLOCK DIAGRAM

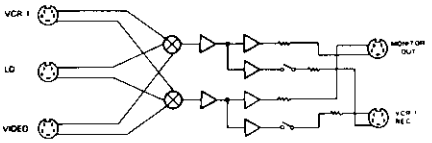
AUDIO



VIDEO



S-VIDEO



SURROUND EFFECT

This unit is equipped with DOLBY PRO LOGIC SURROUND. There's also a DSP (Digital Signal Processor), with a choice of five SFC (Sound Field Control) simulated surround settings.

- **SIMULATED SURROUND:**

The "SIMULATED" creates effects of reverberated and reflected sound from the walls and ceiling similar to a concert hall. These sound-effects added to the actual sound from the source make you feel as if you were in a more expanded space.

Choose the SIMULATED SURROUND mode if the source sound signal is mono.

- **JAZZ:**

This gives you the sound field of a jazz club.

- **CHURCH:**

The sound field of a church, ideal for reproducing the rich sound of a pipe organ.

- **DANCE:**

A "hot" high-energy sound, with extra reverb for greater ambience.

- **HALL:**

You can enjoy a convincing hall sound.

- **THEATER:**

Use this when watching movie sources that have a stereo soundtrack to enjoy the effect of being in a movie theater.

- **PRO LOGIC THEATER**

Use with video software bearing the DOLBY SURROUND mark. The feeling of movement, and outstanding stereo imaging offered by the DOLBY PRO LOGIC SURROUND, together with the atmosphere of a movie theater assure incredible ambience.

- **DOLBY PRO LOGIC SURROUND**

Choose this setting for movie and music (especially Video Discs and video tapes bearing the DOLBY SURROUND mark) playback.
DOLBY PRO LOGIC SURROUND continuously detects the size and direction of the dominant signal and cancels undesirable crosstalk, thereby providing signal emphasis.
You can clearly perceive where the music comes from. Real flow of sound also can be re-created naturally using this feature. You can feel as if being in the outstanding and expansive sound field.

When using DOLBY PRO LOGIC SURROUND, a delay time setting of 20 ms is commonly used. Use a different setting if you prefer.

Note:
Dolby Surround will not operate correctly if the signal passes through a graphic equalizer.
When using Dolby Surround, turn off the TAPE 2 MONITOR or set the graphic equalizer for flat response or to its "through" (or off) setting, if you have one in use.

DOLBY 3CH LOGIC

Combining the rear speaker signal with that of the front speakers results in your being able to enjoy a regenerated sound field which has comparatively more presence and a more expansive feeling from the front 3 channels (front L, front R, and center speakers) than that of ordinary stereo regeneration.
DOLBY 3CH LOGIC can be used with stereo sources not encoded with DOLBY SURROUND.

*

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DOLBY PRO LOGIC SURROUND, DOLBY 3CH LOGIC CENTER MODE

You can choose from the following settings:
Center Mode Choices:

When using a center speaker:

• **NORMAL** — Low range frequencies, which have little effect on directionality and positioning, are routed to the left and right front speakers. You can use a relatively small size speaker as the center speaker.
• **WIDE** — If you use a large size center speaker, choose this setting. The full frequency range of the Dolby Surround center channel, from low to high, is routed to the center speaker.

When not using a center speaker: DOLBY PRO LOGIC SURROUND

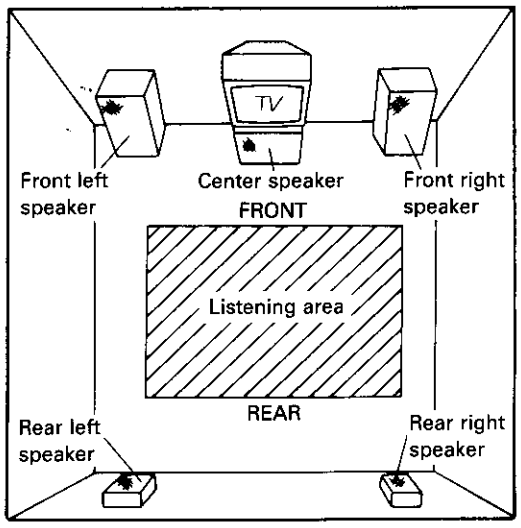
• **PHANTOM** — The signal which would have been sent to the center speaker is divided equally between the left and right front speakers.

With DOLBY PRO LOGIC SURROUND, monaural source sound will be heard only from the center channel at settings other than the PHANTOM position.

SPEAKER INSTALLATION

To get the most out of the surround system, place the speakers as shown below.

An example of speaker positioning



If the rear speakers are positioned at an extreme distance, the surround level becomes unable to adjust and the surround effect will not be fully achieved.

NOTE:
- *To avoid interference with the picture on a nearby TV set, use magnetically shielded speaker systems. This is particularly important for the center speaker since it is usually located closest to the TV.*
- *Position the left and right channel speakers at equal distances from the TV set and approximately six feet from each other.*
- *Position the center speaker above, below, or behind the TV set. Sound may not appear to coincide with the picture if you position it next to the TV set.*
- *Rear speakers are best positioned slightly above ear level.*

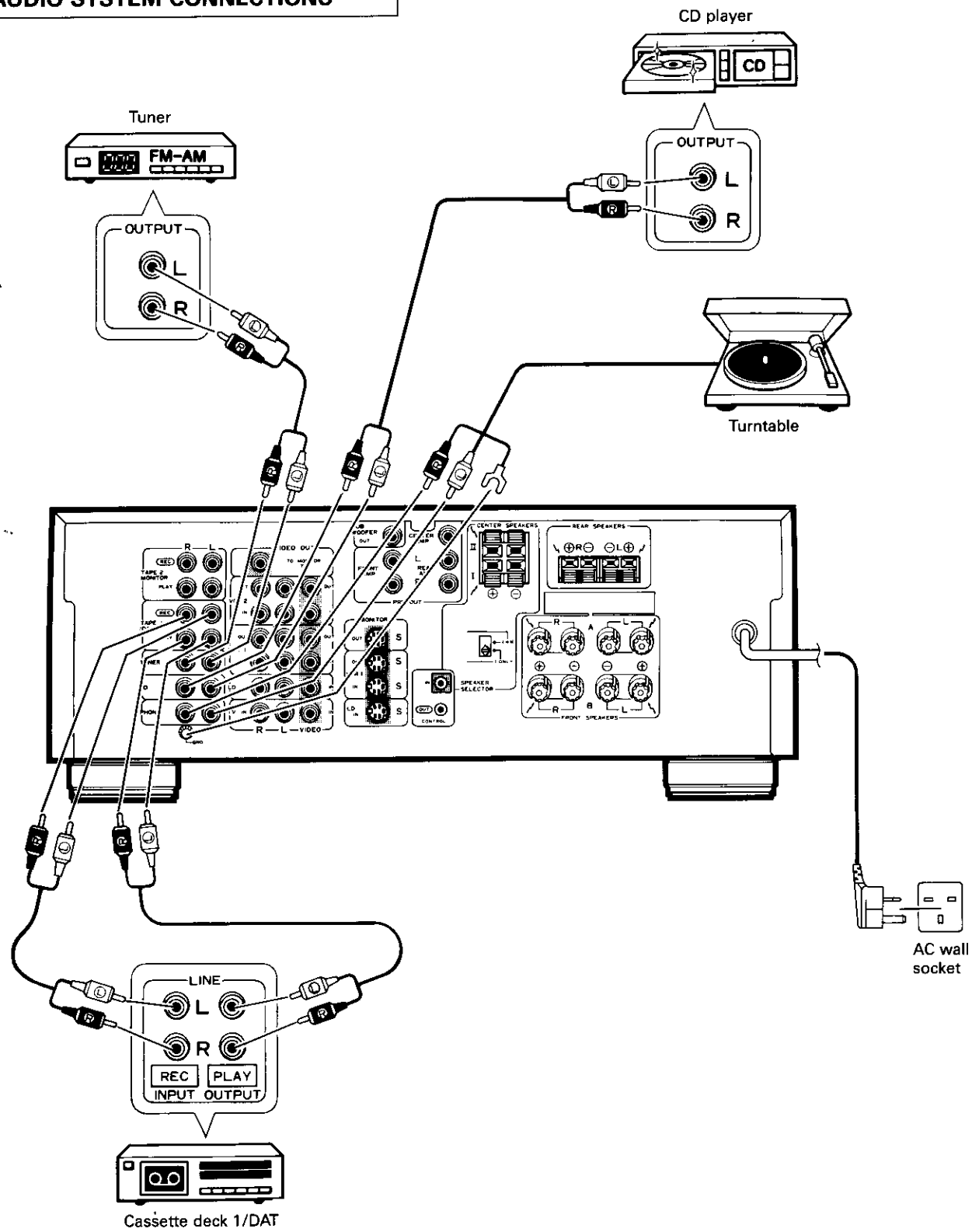
SIMULATED STEREO

This function transforms monaural signals into simulated stereo sound. Use it when you wish to experience a sense of stereo presence when listening to monaural signal sources.

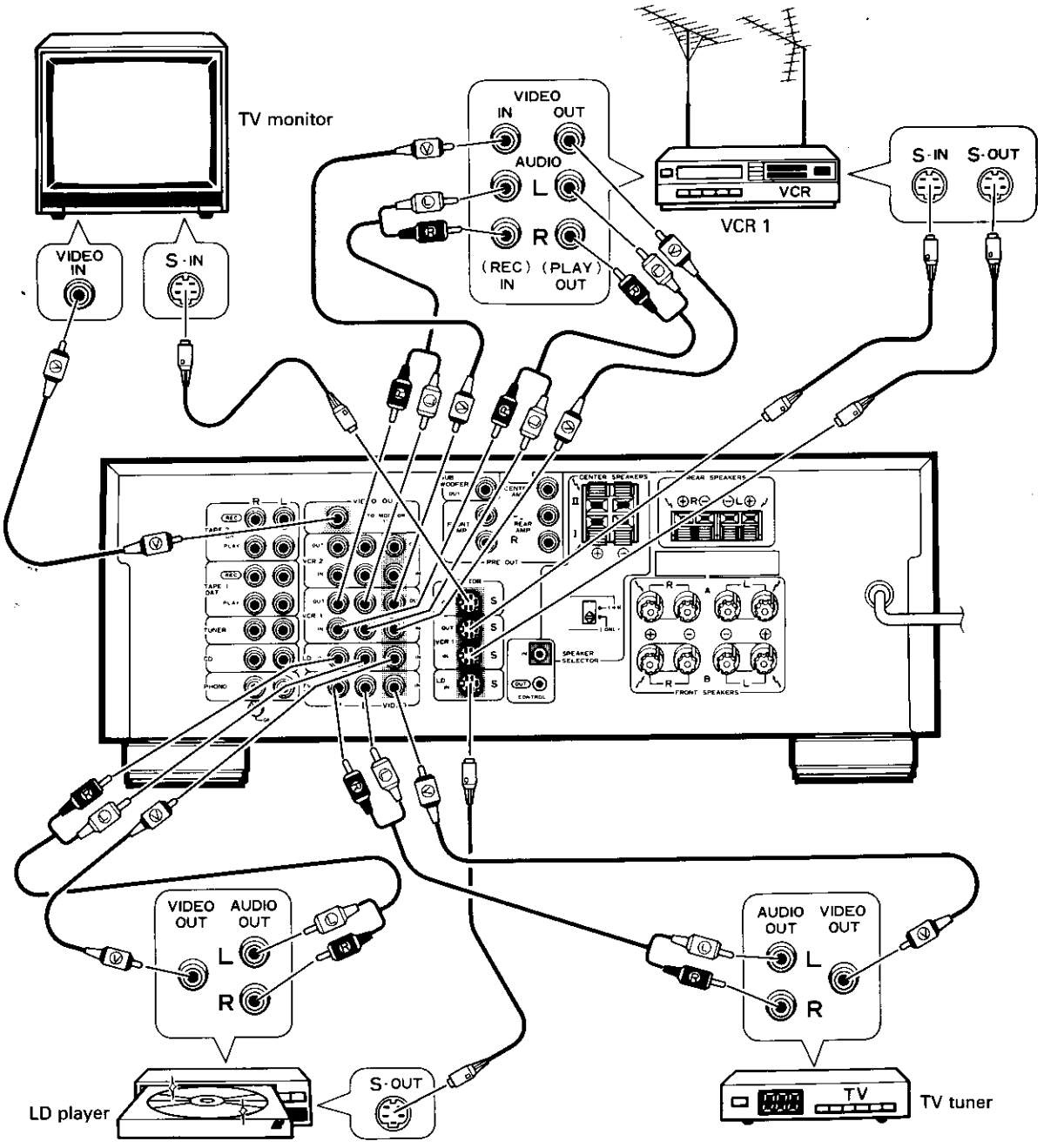
NOTE:
The simulated stereo function can also be used with stereo sound sources, but it will result in an effect somewhat different from the normal stereo sound.

CONNECTIONS

BASIC AUDIO SYSTEM CONNECTIONS



BASIC VIDEO SYSTEM CONNECTIONS



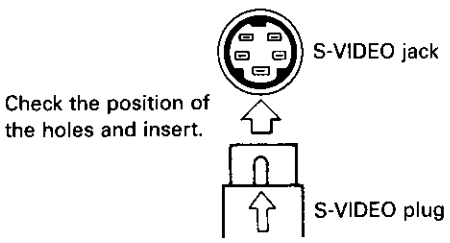
THE S-VIDEO CONNECTORS

When using a VCR 1, LD and TV monitor which has S-VIDEO connectors, they can be connected to the S-VIDEO connectors.
For the operation of components connected to S-VIDEO connectors, refer to the instruction manuals of the corresponding components.

NOTE:

- *In this unit, the S-VIDEO connectors (Y-C separate) and the regular pin jacks are independent, so any signal input through a pin jack must be output from the pin jack, and any signal input through an S-VIDEO connector must be output through the S-VIDEO connector.*
- *The S-VIDEO connector is for the video portion only, be sure to make the proper audio connections.*

How to use S-VIDEO connectors

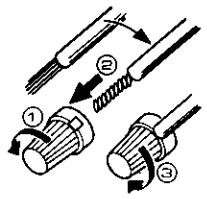


For the method of switching the TV monitor S-VIDEO connector/ VIDEO jack, refer to the TV monitor's instruction manual.

SPEAKER CONNECTIONS

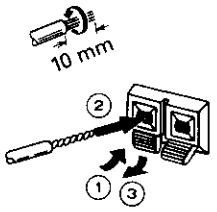
Front speaker cord connection

① Loosen cap.
② Insert wire.
③ Tighten cap.



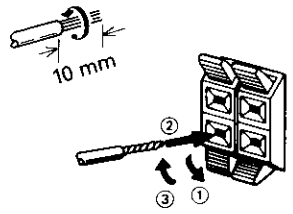
Rear speaker cord connection

① Push the lever up.
② Insert the cord.
③ Pull the lever back.



Center speaker cord connection

① Push the lever down (or up).
② Insert the cord.
③ Pull the lever back.

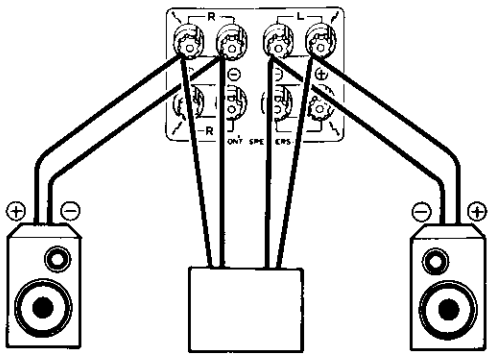


NOTE:

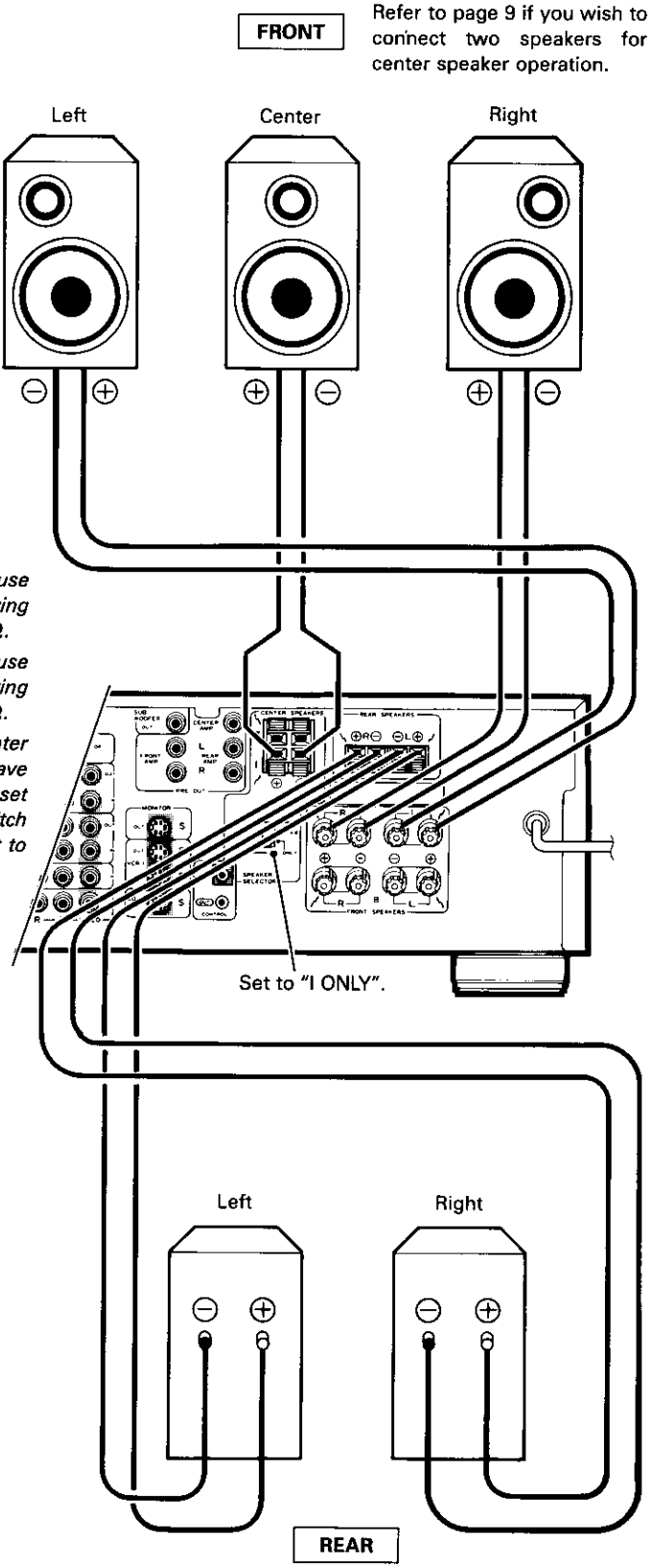
- *For the front speakers, use speaker systems having impedance of 4 Ω to 16 Ω.*
- *For the rear speakers, use speaker systems having impedance of 8 Ω to 16 Ω.*
- *If using only one center speaker, it should have impedance of 8Ω to 16Ω; set SPEAKER SELECTOR switch to "I ONLY" and connect to the I terminals.*

NOTE:

When connecting a super woofer system such as the Pioneer S-W1000, connect it to the same speaker terminals (A or B) to which the front speakers are connected. Connecting the front speakers and super woofer system to terminals A and B respectively will result in reduced volume from the front speakers.



Refer to page 9 if you wish to connect two speakers for center speaker operation.

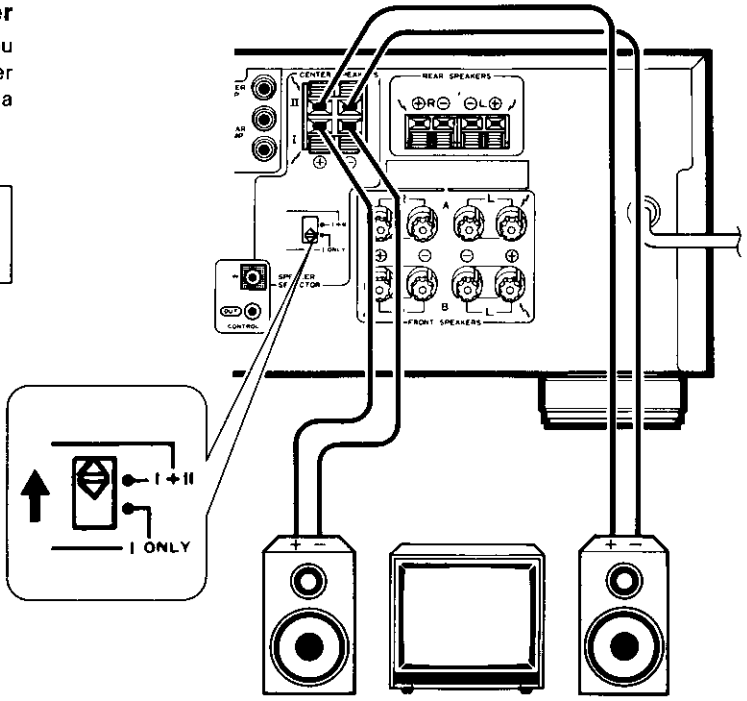


• Connecting Two Center Speakers for Dual Center

There are two terminals for center speakers on the main unit, so you can connect two speakers. When you cannot install a speaker under or behind your TV, installing speakers either side of the TV as a center speaker is just as effective.

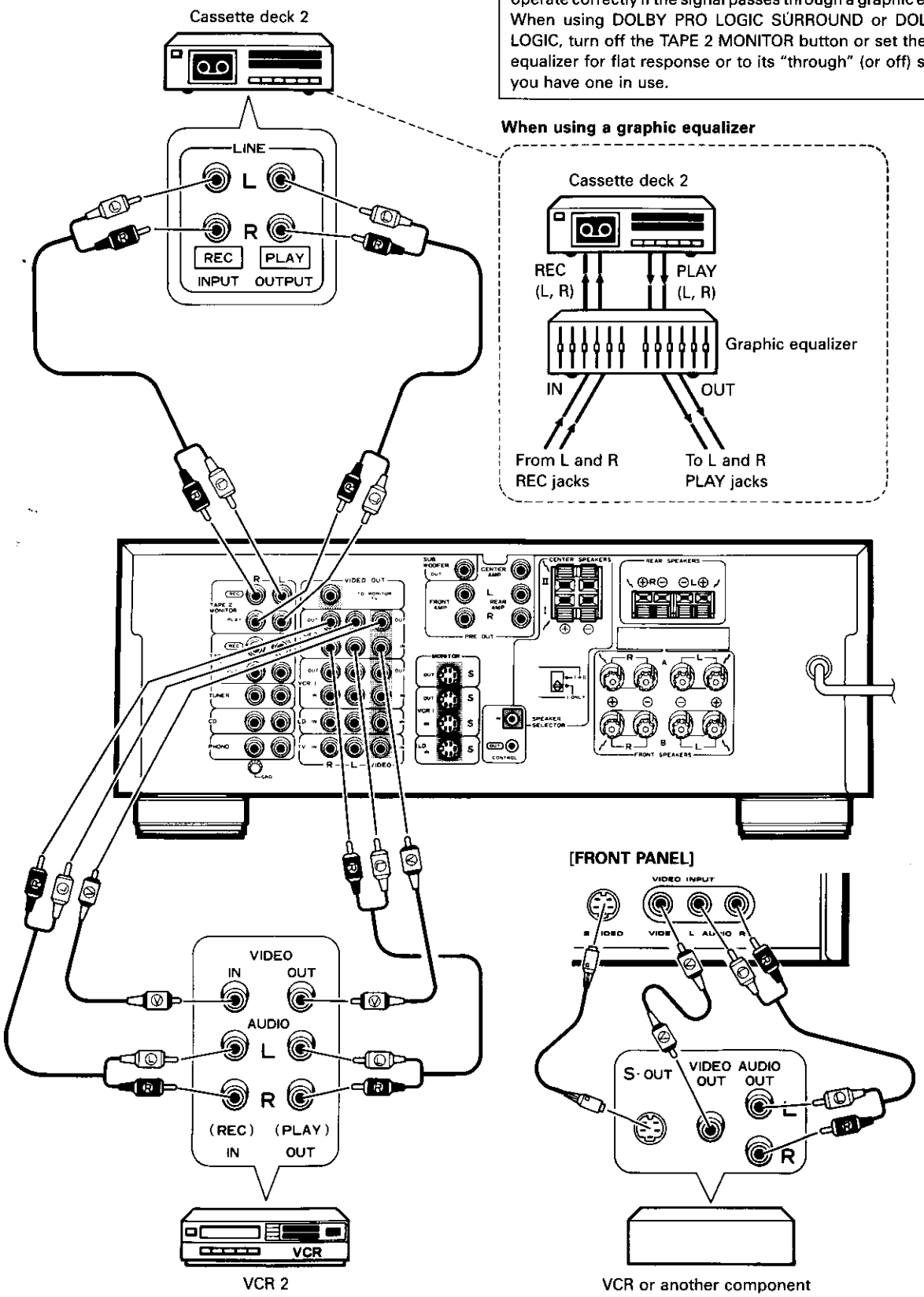
> When the speaker selector switch is in the "I + II" position, be sure to connect two speakers. If only one speaker is connected, there will be no sound.

Both speaker systems should have impedance of 4 Ω to 16 Ω.



APPLICATIONS

NOTE:
DOLBY PRO LOGIC SURROUND and DOLBY 3CH LOGIC will not operate correctly if the signal passes through a graphic equalizer. When using DOLBY PRO LOGIC SURROUND or DOLBY 3CH LOGIC, turn off the TAPE 2 MONITOR button or set the graphic equalizer for flat response or to its "through" (or off) setting, if you have one in use.

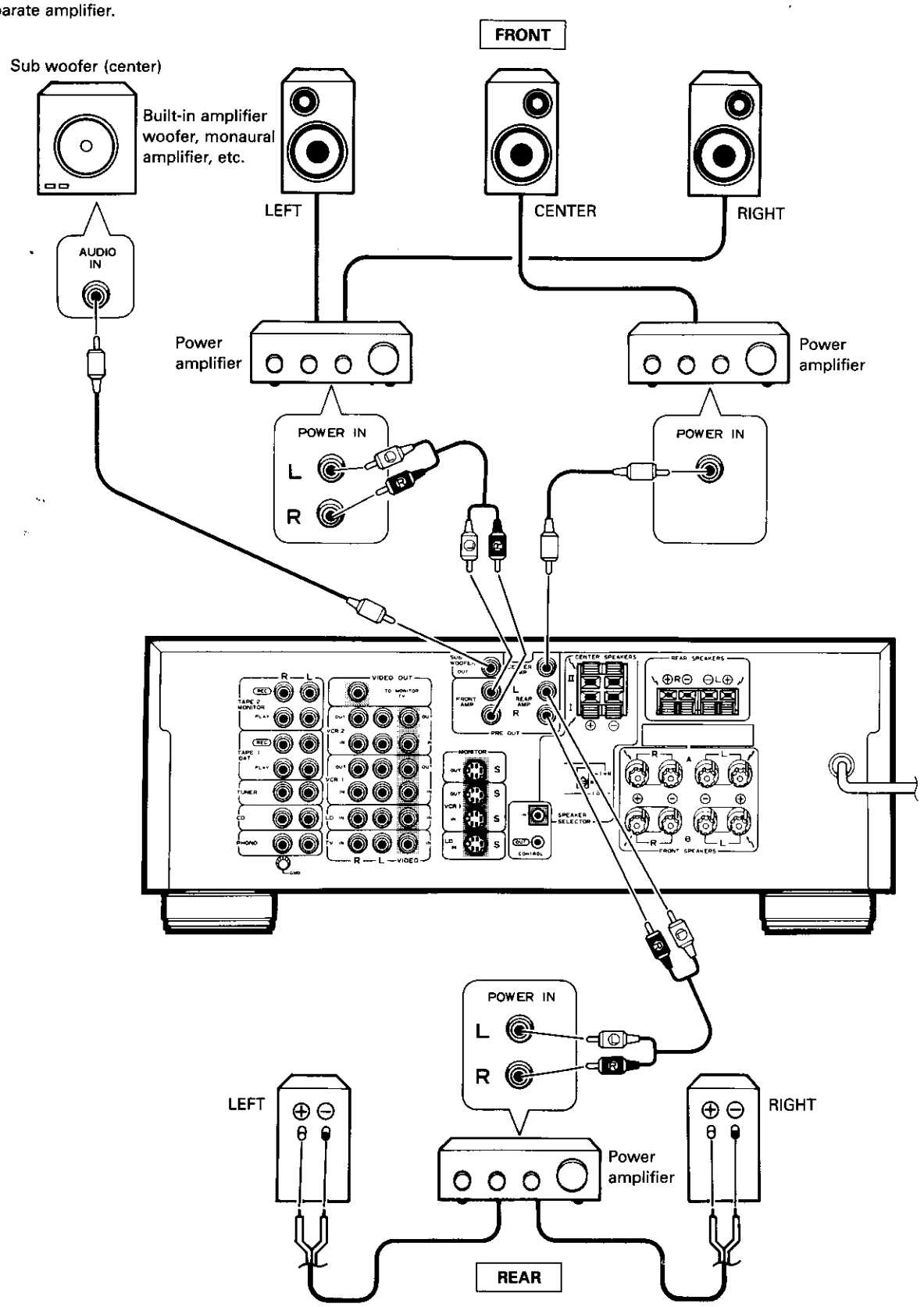


VCR 2

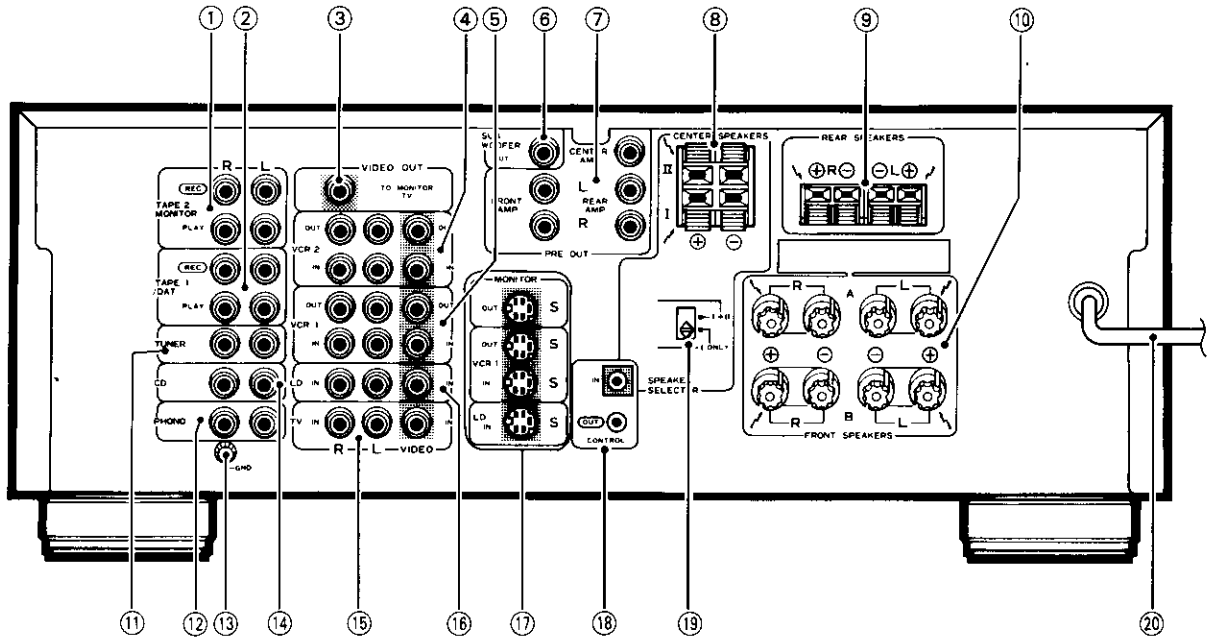
VCR or another component such as a TV camera. (playback only)

When used with additional power amplifier(s)

Use these jacks when using a separate amplifier as the power source instead of this unit, and listening to speakers which are connected to the separate amplifier.



REAR PANEL FACILITIES



① TAPE 2 MONITOR jacks

Connect the second cassette deck to these jacks.

Connecting for Recording

The tape recording jack (REC) on the cassette deck should be connected to the REC side of the TAPE 2 MONITOR jack on the amplifier with a pin plug connecting cord.

Connecting for Playback

Connect the TAPE PLAY jack on the cassette deck to the PLAY side of the TAPE 2 MONITOR jack on the amplifier with a pin plug connecting cord.

② TAPE 1/DAT jacks

Use these to connect the cassette deck or DAT (digital audio tape) deck.

Connecting for Recording

The tape recording jack (REC) on the cassette deck or DAT should be connected to the REC side of the TAPE 1/DAT jack on the amplifier with a pin plug connecting cord.

Connecting for Playback

Connect the PLAY jack on the cassette deck or DAT to the PLAY side of the TAPE 1/DAT jack on the amplifier with a pin plug connecting cord.

③ VIDEO OUT (TV MONITOR) jack

Connect to a monitor TV or to TV sets with video input terminals for watching program materials from a VCR 1, 2 or LD player connected to this unit.

④ VCR 2 jacks

[VIDEO OUT]

When copying program material from the video component connected to the VCR 1 or LD jacks, connect to the VIDEO INPUT jacks of the VCR used for recording.

[AUDIO OUT (L, R)]

When copying program materials from the video component connected to the VCR 1 or LD jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR used for recording.

[VIDEO IN]

When monitoring the video image from a VCR used for copying, connect its VIDEO OUTPUT jacks here.

[AUDIO IN (L, R)]

When monitoring the audio channel from a VCR used for copying, connect its AUDIO OUTPUT jacks here.

⑤ VCR 1 jacks

[VIDEO OUT]

When copying program material from the video component connected to the VCR 2 or LD jacks, connect to the VIDEO INPUT jacks of the VCR used for recording.

[AUDIO OUT (L, R)]

When copying program material from the video component connected to the VCR 2 or LD jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR used for recording.

[VIDEO IN]

When monitoring the video image from a VCR used for playing, connect its VIDEO OUTPUT jacks here.

[AUDIO IN (L, R)]

When monitoring the audio channel from a VCR used for playing, connect its AUDIO OUTPUT jacks here.

⑥ SUB WOOFER OUT jack

If you want to boost the low frequencies, or you want to use the unit in a 3D system, connect to a sub woofer power amplifier.

⑦ PRE OUT jacks

[FRONT AMP]

When a separate power amplifier is used to drive the front speakers, connect the power amplifier to these jacks.

[CENTER AMP]

When a separate power amplifier is used to drive the surround center speaker, connect the power amplifier to this jack.

[REAR AMP]

When a separate power amplifier is used to drive the rear speakers, connect the power amplifier to these jacks.

⑧ CENTER SPEAKER terminals

Connect the center speaker to these terminals. (See ⑲)

NOTE:

Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.

⑨ REAR SPEAKERS terminals

Connect the rear speakers to these terminals.

NOTE:

Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.

Use rear speakers of impedance 8 Ω — 16 Ω.

⑩ FRONT SPEAKERS terminals

A: Connect to the first set of speakers.

B: Connect to the second set of speakers.

Speaker lead wire preparation and connection.

NOTE:

Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.

Use speakers of impedance 4 Ω — 16 Ω.

⑪ TUNER input jacks

Connect to the output jacks of the tuner.

⑫ PHONO input jacks

Connect to the output cables from a turntable.

⑬ GND terminal

Connect the turntable ground lead to this terminal.

⑭ CD input jacks

Connect to the output jacks of a compact disc player.

⑮ TV jacks (input)

Use these jacks if you wish to connect a TV tuner with both video and audio outputs.

[VIDEO IN]

Connect the TV tuner's VIDEO OUTPUT to this jack.

[AUDIO IN (L, R)]

Connect the TV tuner's AUDIO OUTPUT to these jacks.

⑯ LD jacks

[VIDEO IN]

When watching the video image from an LD player, connect its VIDEO OUTPUT jacks here.

[AUDIO IN (L,R)]

When playing back the audio channel from an LD player, connect its AUDIO OUTPUT jacks here.

⑰ S (connector) video jacks (LD, VCR, MONITOR)

When used in conjunction with a VCR, Video disc player (LaserDisc player) or TV monitor equipped with S video jacks, connect to these jacks. See page 7.

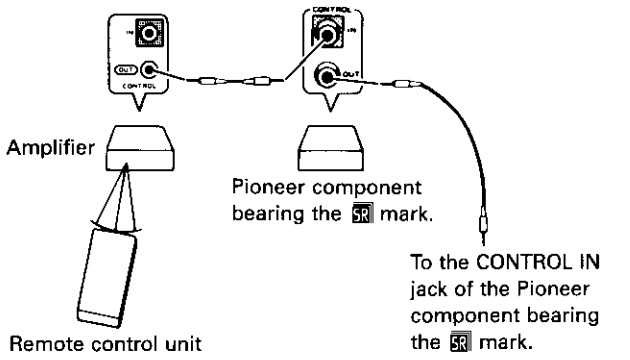
⑱ CONTROL IN/OUT jacks

IN: Connect this jack to other Pioneer components (main unit or remote control unit) when using those components to control this unit.

OUT: Connect this jack to other Pioneer components when using the remote control of this unit to control the other components.

NOTE:

The amplifier's remote sensor does not function when a plug is inserted in the IN jack. To operate, point the remote control unit at the remote sensor on the component to which the amplifier's IN jack is connected.


Amplifier
Pioneer component bearing the SR mark.
To the CONTROL IN jack of the Pioneer component bearing the SR mark.
Remote control unit

⑲ CENTER SPEAKER SELECTOR Switch

This switch changes the speaker impedance for when only one center speaker is connected, or two speakers are connected.

When only one speaker is connected:

Be sure to set the switch to "I ONLY" (down side), and always connect a speaker with impedance of 8 to 16 Ω to the I terminal.

When two speakers are connected:

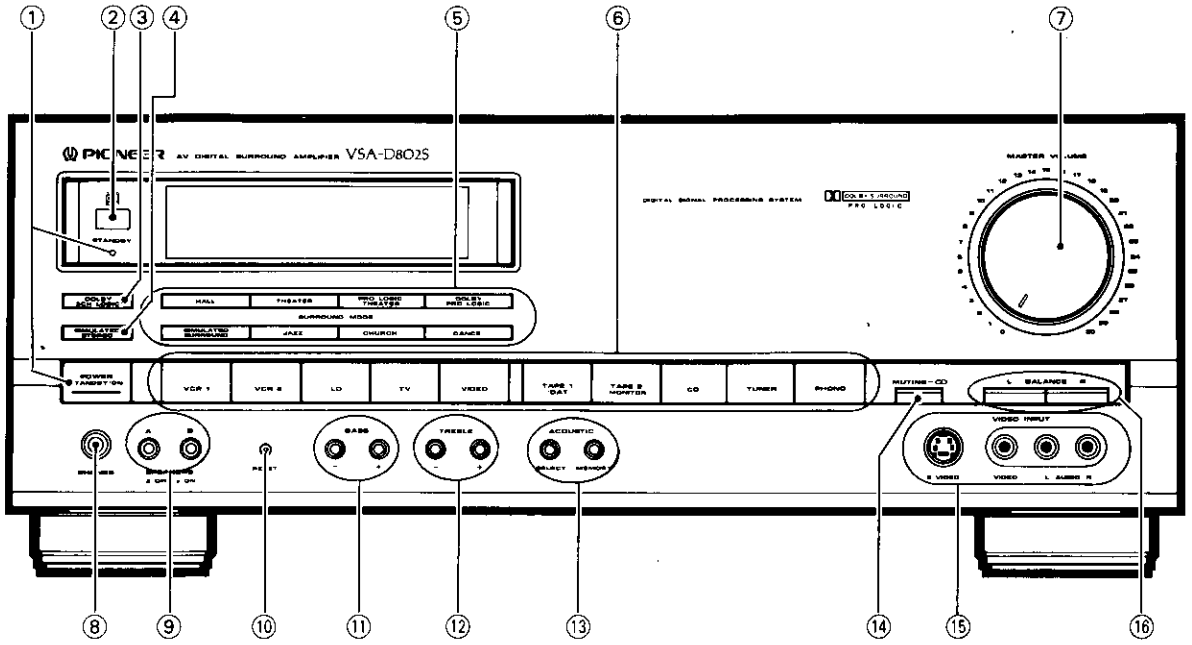
Be sure to set the switch to "I + II" (up side), and always use speakers with an impedance of 4 to 16 Ω.

NOTE:

Switch the SPEAKER SELECTOR when the unit power supply is at STANDBY. Do not switch the selector when the power supply is ON.

⑳ Power cord

FRONT PANEL FACILITIES



① POWER STANDBY/ON switch/STANDBY indicator

This is the switch for electric power.

ON: When set to the ON position, power is supplied and the unit becomes operational.

STANDBY: When set to STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.
The STANDBY indicator lights when the power is STANDBY, and goes out during ON.

[Timer ON/OFF possible]

When the unit is switched ON, ON/OFF control can be performed by means of the optional timer.

NOTE:

When the power is initially turned ON, muting will be applied to prevent sound from being output for about 5 seconds.

② Remote sensor

③ DOLBY 3CH LOGIC button

Select this setting when stereo-source regeneration and rear speakers are not connected and you wish to use the front L, front R, and center speakers to enjoy audio/visual material bearing the DOLBY SURROUND mark.

④ SIMULATED STEREO button

Press to produce a simulated stereo effect when listening to monaural sources (for example, normal AM or TV broadcasts). "SIMULATED STEREO" appears on the display section.

NOTE:

- *This effect is not produced through the rear speakers.*
- *Use with the SURROUND MODE in the OFF position.*

⑤ SURROUND MODE selector buttons

See page 4 "SURROUND EFFECT".

⑥ Input selector buttons

VCR 1: Press when performing playback on a first VCR unit.
VCR 2: Press when performing playback on a second VCR unit.
LD: Press when performing playback on an LD player.
TV: Press when using a TV tuner connected to the TV jacks.
VIDEO: Press when performing playback on a VCR connected to VIDEO INPUT jacks on the front panel.
TAPE 1/DAT:
Press when performing playback on a DAT or cassette deck.
TAPE 2 MONITOR:
Press when performing playback on a second cassette deck or second DAT and when monitoring recording.
CD: Press when playing compact discs on a CD player.
TUNER: Press when listening to radio broadcasts.
PHONO: Press when playing records on a turntable.

⑦ MASTER VOLUME control

Use it to simultaneously adjust the sound volume from the front, center and rear speakers.

⑧ PHONES jack

Connect the plug on your headphones to this jack. Set all SPEAKERS A and B switches to OFF if you want to cut the sound from the speakers and listen only through the headphones.

⑨ SPEAKERS buttons (A, B) ■OFF ▬ON

ON/OFF switches for the A and B speaker systems.

NOTE:

No sound will be heard through the speakers when both A and B buttons are depressed if only one set of speakers has been connected to either A or B SPEAKERS terminals.

⑩ RESET button

Use this when normal operation becomes impossible because of external influences such as static electricity or lightning, or when operation is impossible even when operation buttons are pressed. Press this button to return to normal operating conditions.
If you press this button when the power is ON, the unit switches to POWER STANDBY, and the entire contents of the memory are erased.

⑪ BASS control buttons

Use to adjust the low-frequency level. Press the + button to increase the low-frequency level, and the − button to decrease it.
The TONE indicator appears on the display section.
When both buttons (−, +) of the BASS control are pressed simultaneously, the bass response will be set to the flat (normal) condition.

⑫ TREBLE control buttons

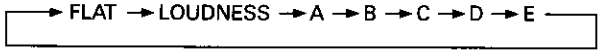
Use to adjust the high-frequency level. Press the + button to increase the high-frequency level, and the − button to decrease it.
The TONE indicator appears on the display section.
When both buttons (−, +) of the TREBLE control are pressed simultaneously, the treble response will be set to the flat (normal) condition.

⑬ ACOUSTIC buttons

MEMORY:
Pressing this button will result in the memorization of the sound quality (tone control condition).

SELECT:

- This button is used to preset the five acoustic memories (A—E).
- This button is also used to recall previously set sound quality settings. Each time you press the button, the sound quality setting advances in the order shown below.



FLAT: For flat (normal) frequency response.
LOUDNESS: Emphasizes the low- and high- frequency ranges. Produces a fuller sense of sound, particularly when listening at low volume.
A—E: Memorized acoustic memory settings.

⑭ MUTING (−∞) button

Press to temporarily cut off the sound volume. The display section MUTING indicator will flash. When pressed again, the sound will return to its previous level.

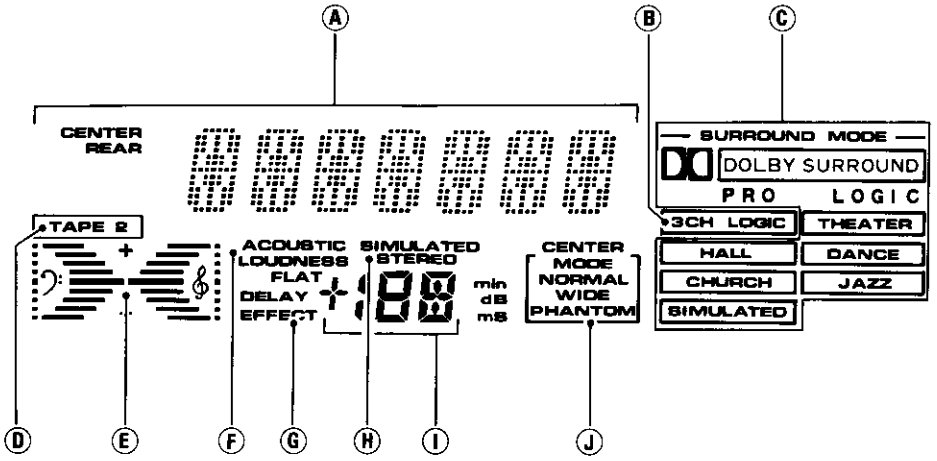
⑮VIDEO INPUT jacks

Video components such as a VCR or TV camera, etc. can be connected here.

⑯ BALANCE buttons

Use these to simultaneously adjust the left and right sound volume balance on the front and rear speakers.
L: Press to decrease the sound on the right side.
R: Press to decrease the sound on the left side.
Press L and R together to bring the volume balance back to center.

DISPLAY SECTION



Ⓐ CHARACTER/BALANCE display

- This displays the name of the component selected with the input selector, etc.
- It also displays the rear level, center level and balance settings during adjustment.

Ⓑ DOLBY 3CH LOGIC indicator

Ⓒ SURROUND MODE indicators

Ⓓ TAPE 2 indicator

Lights up when the input selector is set to TAPE 2 MONITOR ON.

Ⓔ TONE level indicator

Shows the settings of the BASS and TREBLE buttons.

Ⓕ ACOUSTIC display

Shows the setting of the ACOUSTIC MEMORY.

Ⓖ DELAY/EFFECT indicator

Ⓗ SIMULATED STEREO indicator

Ⓘ ACOUSTIC/DELAY TIME/EFFECT LEVEL/SLEEP TIME display

- Indicates delay time (ms) when using DOLBY PRO LOGIC SURROUND.
- Indicates rear level and center level (dB).
- Indicates sleep timer settings (min).
- Displays Acoustic memory letters A to E.
- Displays surround effect level from 10 to 100.

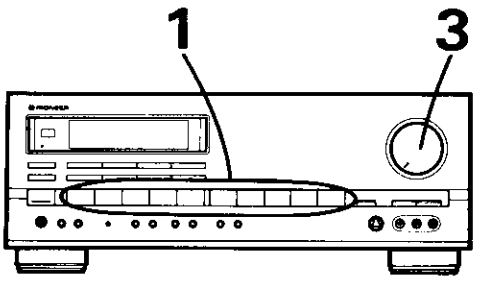
Ⓙ CENTER MODE indicators

These display the center mode (NORMAL, WIDE, PHANTOM) during DOLBY PRO LOGIC SURROUND. With DOLBY 3CH LOGIC, NORMAL or WIDE center mode will be indicated. (Refer to pages 4 and 5.)

OPERATING THE AUDIO/VIDEO COMPONENTS

Press the power switch to the ON position, and turn on the power to the other components you wish to use (for example, TV, VCR, cassette deck, etc.).

PLAYBACK



1. **Use the input selector buttons to select the desired program source.**

Program Source	Input selector
To listen to records	PHONO
To listen to radio	TUNER
To listen to compact discs	CD
To listen to a tape on the cassette deck (or digital audio tape deck) connected to TAPE 2 MONITOR jacks	TAPE 2 MONITOR
To listen to a tape on the cassette deck (or digital audio tape deck) connected to TAPE 1/DAT jacks	TAPE 1/DAT
To watch the TV picture from a TV tuner connected to the TV jacks	TV
To watch a LaserDisc	LD
To watch a video cassette tape on the VCR connected to VCR 2 jacks	VCR 2
To watch a video cassette tape on the VCR connected to VCR 1 jacks	VCR 1
To watch a VCR connected to VIDEO INPUT jacks of front panel	VIDEO

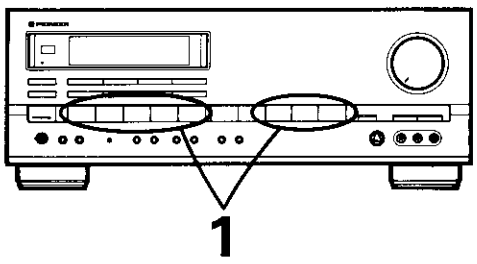
* If you select a music source other than TAPE 2, switch OFF the TAPE 2 MONITOR.

2. **Operate the appropriate audio/video component to play back the program source.**
   - For a video source, switch the TV connected to this unit to the video input mode.
3. **Adjust the volume and tone controls as desired.**
   - When listening to a monaural source, turn the SIMULATED STEREO button ON to enjoy simulated stereo sound.
   - Refer to page 19 for details concerning surround operation.
   - Refer to page 19 for details concerning sound quality adjustment.

RECORDING WITH A CASSETTE DECK

RECORDING WITH TAPE 1/DAT

If the TAPE 2 MONITOR button is ON, press to turn OFF.



1. **Select the source you want to record from with the input selector buttons.**
2. **Start recording on TAPE 1/DAT cassette deck (or DAT deck).**
3. **Play the desired program source (record, compact disc, etc.).**
   • The volume, balance and tone controls have no effect on the recording.

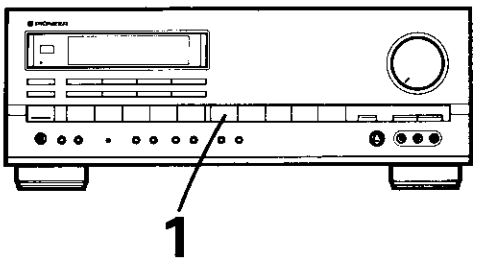
RECORDING WITH TAPE 2

1. **Select the source you want to record from with the input selector buttons.**
2. **Start recording on the TAPE 2 cassette deck.**
3. **Play the desired program source (record, compact disc, etc.).**

USING VCR 1, VCR 2 FOR AUDIO RECORDING

The audio signal output from the VCR 1 and VCR 2 AUDIO REC jacks is the same as that output from the TAPE 1/DAT REC jacks, so you can record using the same procedure as for recording with TAPE 1/DAT.

COPYING TAPES



The following operation concerns TAPE 1 to TAPE 2 copying. TAPE 2 to TAPE 1 copying is not possible.

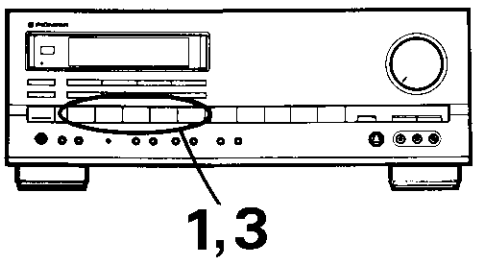
1. **Press the TAPE 1/DAT input selector button.**
2. **Load the TAPE 1/DAT cassette deck (or DAT deck) with a tape to playback.**
3. **Load the TAPE 2 cassette deck with a tape to record to.**
4. **Start recording on the TAPE 2 cassette deck.**
5. **Start playback on the TAPE 1/DAT cassette deck (or DAT deck).**

Tape monitoring

When recording is performed on a cassette deck equipped with monitoring function, the recorded sound can be monitored through the speaker system by pressing the TAPE 2 MONITOR button to ON.

VIDEO RECORDING

Refer to the connection procedures on pages 7 to 11 and refer to the VCR's Operating Instructions regarding proper operation procedures. Recording can be performed on both VCR 1 and VCR 2.

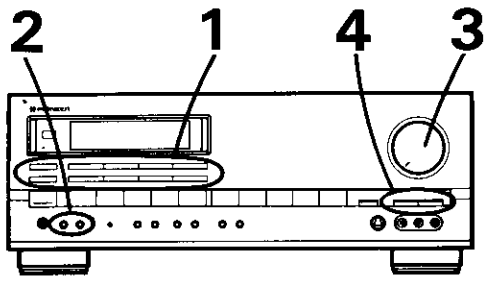


1. **Select the source to record from with the input selector buttons.**
   • When recording from a LaserDisc on VCR 1 or VCR 2 → LD
   • When recording on VCR 1 or VCR 2 from the TV tuner → TV
   • When recording from VCR 1 on VCR 2 → VCR 1
   • When recording from VCR 2 on VCR 1 → VCR 2
   • When recording on VCR 1 or VCR 2 from a component connected to the front panel VIDEO INPUT jacks → VIDEO
2. **Begin recording on the VCR.**
   • For VCR, select a line input (external input)
3. **Begin playback on the component selected with the input selector buttons.**

DOLBY PRO LOGIC SURROUND, PRO LOGIC THEATER AND DOLBY 3CH LOGIC

Use with video or audio software bearing the DOLBY SURROUND mark.
Use DOLBY PRO LOGIC SURROUND or PRO LOGIC THEATER when rear speakers are connected, and DOLBY 3CH LOGIC when rear speakers are not connected.
For correct surround reproduction, be sure to perform the following adjustments.

LEVEL ADJUSTMENT



1. **Use SURROUND MODE buttons to select DOLBY PRO LOGIC SURROUND or PRO LOGIC THEATER; or switch DOLBY 3CH LOGIC ON with the DOLBY 3CH LOGIC button.**
2. **Use SPEAKERS button to turn on front speakers.**
3. **Adjust MASTER VOLUME to a suitable listening level.**
4. **Press BALANCE L and R buttons together.**
5. **Select the CENTER MODE (NORMAL, WIDE, PHANTOM) setting with the remote control CENTER MODE button.**
6. **Press the remote control TEST TONE button.**
7. **With the remote control BALANCE (L, R), CENTER LEVEL (+, −), and REAR LEVEL (+, −) buttons, adjust the test tone volume level so that it is the same from each speaker.**
8. **Press the remote control TEST TONE button to switch the test tone OFF.**

NOTE:

- *The TEST TONE turns off if you operate the input selector.*
- *CENTER MODE PHANTOM selection, REAR LEVEL and REAR BALANCE adjustment are not possible during DOLBY 3CH LOGIC.*

OPERATION

1. **Select the desired surround mode or DOLBY 3CH LOGIC.**
2. **Select the component for playback with the input selector buttons.**
3. **Select the center mode with the remote control CENTER MODE button.**
4. **Begin playback.**
5. **Adjust volume level with the MASTER VOLUME control.**

SETTING THE DELAY TIME

When using DOLBY PRO LOGIC SURROUND, you can set the delay time between 16 ms and 30 ms (2 ms step). The standard setting is 20 ms, but you can select any setting of your choice.
When you press the DELAY button on the remote control, DELAY TIME lights in the display section, with numerical indication of the delay time.

SETTING THE EFFECT LEVEL

When using PRO LOGIC THEATER, adjust the total effect to your desired level with the EFFECT buttons of the remote control unit.

- A numerical display from 10 to 100 of the effect level is shown in the display section.

SIMULATED SURROUND, DANCE, HALL, THEATER, JAZZ, CHURCH

Besides DOLBY PRO LOGIC SURROUND, this unit is equipped with DSP that provides different SFC surround modes. You can control the level of the surround effect with the EFFECT buttons of the remote control.

LEVEL ADJUSTMENT

1. **Press the remote control TEST TONE button to switch the test tone ON.**
2. **Adjust so that the volume level is the same from each of the speakers.**
   - Adjust front speaker balance with the amplifier balance buttons.
   - For the rear speakers, set the remote control Level/Balance select switch to the desired position, and adjust the balance with the L, R buttons, and the level with the +, − buttons.
3. **Press the remote control TEST TONE button to switch the test tone OFF.**

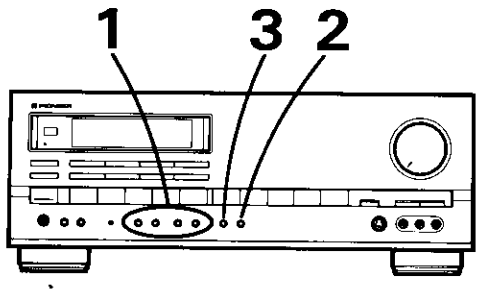
SETTING THE EFFECT LEVEL

1. **Select one of the SURROUND MODE buttons.**
   - The selected surround mode indicator lights in the display section.
2. **Adjust the total effect to your desired level with the EFFECT buttons of the remote control.**
   - A numerical display from 10 to 100 of the effect level is shown in the display section.

HOW TO USE THE ACOUSTIC MEMORY

Memorized tone settings can be recalled using the SELECT button. Up to five different tone settings can be memorized.

Setting the Acoustic Memory



1. **Adjust the sound quality as desired using the BASS and TREBLE control buttons.**
   - Setting is shown by the TONE level indicator on the display section.
2. **Press the MEMORY button.**
   - The acoustic memory letters on the display section blink on and off.
3. **Press the SELECT button and select the acoustic memory to which you wish to assign the setting (A — E).**
   - The sound quality setting is memorized approximately five seconds after you last press the SELECT button.

In this way, the desired tone will be preset in one of the five acoustic memory positions. To preset four other desired tone settings, perform the same operations.

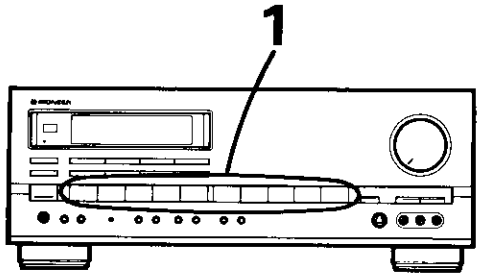
Recalling tone setting in the Acoustic Memory

To recall the memorized tone settings, press the SELECT button to select the desired memory position.

FLAT → LOUDNESS → A → B → C → D → E

FLAT: For flat (normal) frequency response.
LOUDNESS: Emphasizes the low- and high-frequency ranges. Produces a fuller sense of sound, particularly when listening at low volume.
A — E: Memorized acoustic memory settings.

USING THE VIDEO SIGNAL SELECTOR



This function can be used to allow you to listen to the playback sound while changing the video image only, thus allowing you to playback and record video images different from the playback sound source.

1. **Select the component you want to listen to with the input selector buttons.**
2. **Select the video component you want to watch with the VIDEO SIGNAL SELECTOR button.**
   - It is indicated in the VIDEO SIGNAL display section.
3. **Start playback of the component selected with the input selector buttons, and the component selected with the VIDEO SIGNAL SELECTOR button.**

[Recording to a VCR]
Carry out the following after completing procedure 3.

① **Insert a video cassette tape into the VCR to be used for recording.**
② **Set the recording VCR to the recording mode.**
③ **Start playback of the component selected with the input selector buttons, and the component selected with the VIDEO SIGNAL SELECTOR button.**

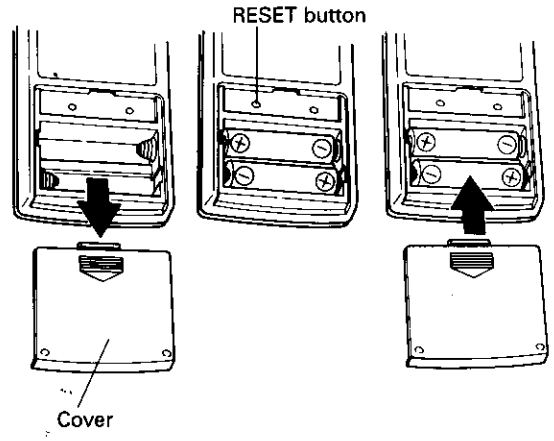
CAUTION:

If you must operate the VIDEO SIGNAL SELECTOR button during recording, do so after setting the recording VCR to the pause mode. If the button is operated when the tape is traveling during recording, the recorded image and sound may be disrupted at the point at which the button is operated.

REMOTE CONTROL OPERATION

LOADING BATTERIES

1. **Open the battery compartment cover on the rear of the remote control unit. The cover should open easily if you slide it in the direction of the arrow while pressing on it with your thumb.**
2. **Take out the two supplied batteries (IEC LR6/AM-3), and insert them into the battery compartment in accordance with the indications in the compartment.**
3. **Press the RESET button.**
4. **Close the cover of the battery compartment.**



Incorrect use of batteries may lead to leakage or rupture. Always be sure to follow these guidelines:

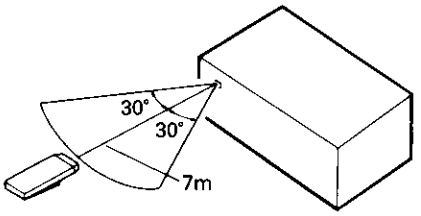
A.
Always insert batteries into the battery compartment correctly matching the positive (+) and negative (−) polarities, as indicated inside the compartment.

B.
Never mix new and used batteries.

C.
Batteries of the same size may have different voltages, depending on their type. Do not mix different types of batteries.

REMOTE CONTROL RANGE

When operating the remote control unit, point the front of the unit at the front panel of the amplifier. The remote control unit may be used within a range of about 7 meters from the remote sensor, within angles of up to about 30 degrees.
Performance of the remote control unit is adversely affected in the presence of strong fluorescent light. Keep such lights away, especially from the sensor window.



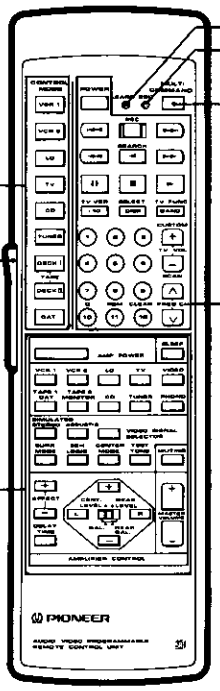
Battery Replacement

When the batteries have run out, the CONTROL MODE buttons will not light properly. If left like this, programs will be erased, so be sure to replace the batteries as soon as possible. Remove the old batteries only if they can be replaced by new ones immediately. Also be sure to always use the specified batteries (size "AA" (IEC LR6/AM-3) alkaline batteries).

NOTE:
When no batteries are inserted, the programmed memory contents will be erased after about 30 minutes.
When you want to clear the Programmed memory, refer to page 28.
The memory cannot be cleared simply by removing the batteries.

OUTLINE OF BUTTON LAYOUT

- The buttons on the lower half of the remote control command amplifier functions.
- Buttons on the upper half are used to operate other components.
- Operation buttons for other components can learn the command signals of other remote control units.
- A maximum of seven commands can be programmed into the MULTI COMMAND button, enabling transmission of a sequence of commands at the push of a button.



LEARN button (Page 26)

EDIT button (Page 28)

MULTI COMMAND button (Page 28)

CONTROL MODE buttons (Page 23)

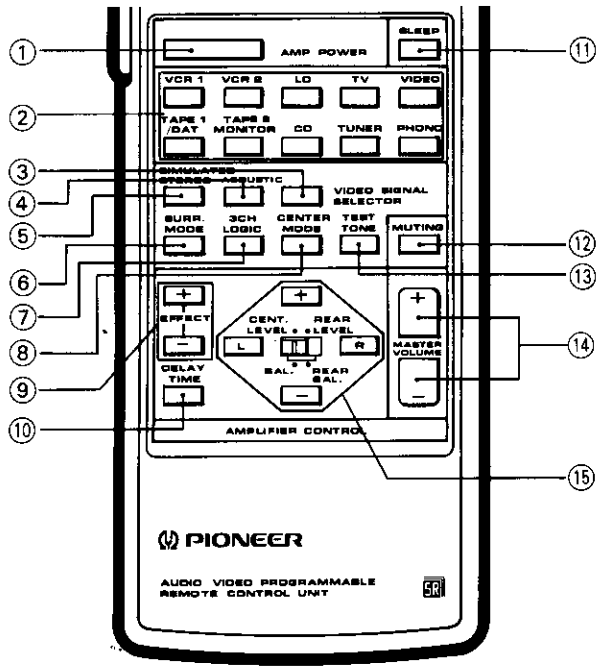
MODE CHECK button (Page 26)

Amplifier control buttons (Page 22)

Operation buttons (Page 23)
These buttons can be programmed with commands of other remote control units. (Page 26)

The initial functions can operate all products compatible with PIONEER's common system remote control units marked with the symbol SR.

AMPLIFIER CONTROL BUTTONS



① AMP POWER button
Switches the amplifier power between ON and STANDBY.

② Input selector buttons
Press when switching the amplifier's input selector.
The CONTROL MODE also switches to the same component (except VIDEO and PHONO) (One CONTROL MODE button lights).
Pressing TAPE 1/DAT, TAPE 2 MONITOR, causes the CONTROL MODE DECK II button to light.

③ VIDEO SIGNAL SELECTOR button
This switches just the video signal in sequence, leaving the sound unchanged.

→ VCR 1 → VCR 2 → LD → TV → VIDEO → OFF →

④ ACOUSTIC select button
The acoustic setting changes in the following manner each time this button is pressed.

→ FLAT → LOUDNESS →
→ E ← D ← C ← B ← A ←

⑤ SIMULATED STEREO button
When playing back a monaural source, press to switch the simulated stereo function ON/OFF.

⑥ SURR. (SURROUND) MODE button
The surround mode changes in sequence each time you press this button.

⑦ 3CH LOGIC button
Switches DOLBY 3CH LOGIC on and off.

⑧ CENTER MODE button
When DOLBY PRO LOGIC SURROUND or DOLBY 3CH LOGIC are ON, use to switch the center mode.

[DOLBY PRO LOGIC SURROUND]

→ NORMAL → WIDE →
→ PHANTOM ←

[DOLBY 3CH LOGIC]

→ NORMAL → WIDE →

⑨ EFFECT (+, −) buttons
Effect level can be adjusted when in a surround mode other than DOLBY PRO LOGIC SURROUND.

⑩ DELAY TIME button
During DOLBY PRO LOGIC SURROUND operation, delay time settings can be changed from 16 ms to 30 ms in 2 ms steps.
The DELAY TIME button operates only with DOLBY PRO LOGIC SURROUND.

⑪ SLEEP timer button
Activates the SLEEP timer. The length changes in the following manner each time the button is pressed.

→ 90 → 60 → 30 → 0 (OFF) →
Unit: minutes

When SLEEP is ON, the display section is about half as bright as when SLEEP is OFF.

⑫ MUTING button
Used to temporarily mute the sound.
The volume is restored when pressed again.

⑬ TEST TONE button
Use to adjust the test tone volume level from each speaker.
When the test tone is switched ON, TEST is displayed in the display section, and the test tone is output through each speaker in turn for about two seconds. Adjust volume level so that it is the same from each speaker.

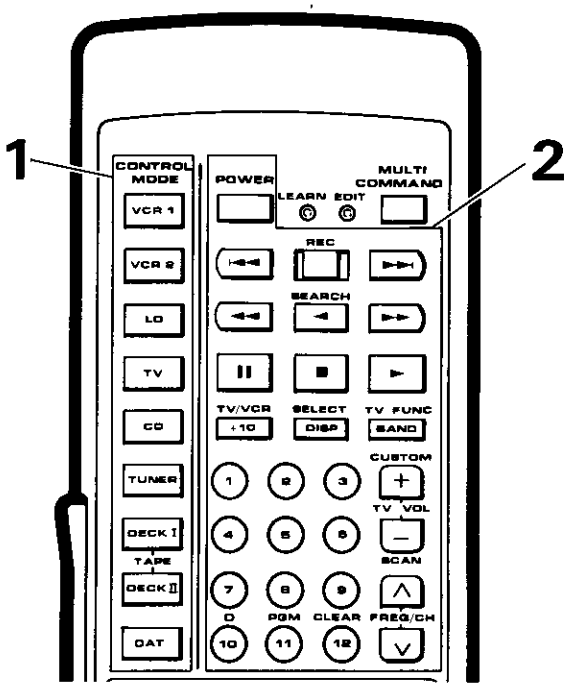
⑭ MASTER VOLUME (+, −) buttons
Adjusts the overall volume.

⑮ LEVEL (+, −)/BALANCE (L, R) buttons and select switch
[Select switch: CENT. LEVEL · BAL.]
(+, −)
Adjusts the center speaker sound level.
(L, R)
Use to simultaneously adjust the left and right sound volume balance on the front and rear speakers.
[Select switch: REAR LEVEL · REAR BAL.]
(+, −)
Adjusts the sound level of the rear speakers to the level of the front speakers.
(L, R)
Enables balance adjustment of left and right rear speakers.

OPERATING OTHER COMPONENTS

REMOTE CONTROLLING OF ANY OTHER OF YOUR AUDIO-VISUAL COMPONENTS VIA THIS UNIT REQUIRES:

1. All components must be remote controllable (have a sensor window on the front panel) to receive direct command from this unit, upon successful learning of those commands by this programmable unit or,
2. All units must have remote control jacks (IN/OUT) on the rear panel and be correctly connected to the amplifier according to the diagram on page 13.

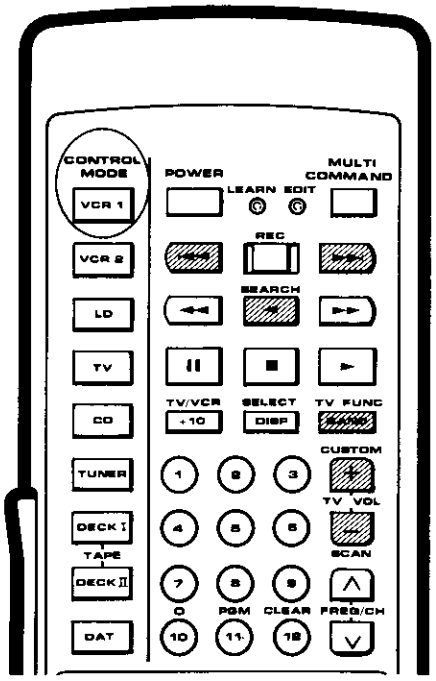


When operating components other than the amplifier:

1. **Press the CONTROL MODE buttons for the component you want to operate.**
2. **Press the operation button.**

▨ buttons do not operate in the selected CONTROL MODE.

VCR 1 operation



(With VCR 2, even if you press an operation button, no signal is output. Preset or program and use.)

POWER button:
Switches VCR power ON/OFF.

REC (REC) button:
Selects the recording mode.

◄◄ (REW) button:
Rewinds the tape and allows picture search.

►► (FF) button:
Rapidly advances the tape and allows picture search.

II (PAUSE/STILL) button:
Sets pause and still picture.

■ (STOP) button:
Stops tape transport.

► (PLAY) button:
Selects playback.

TV/VCR button:
This button can be used only for VCRs with a TV/VCR selector.
Toggles the antenna output between TV and VCR.

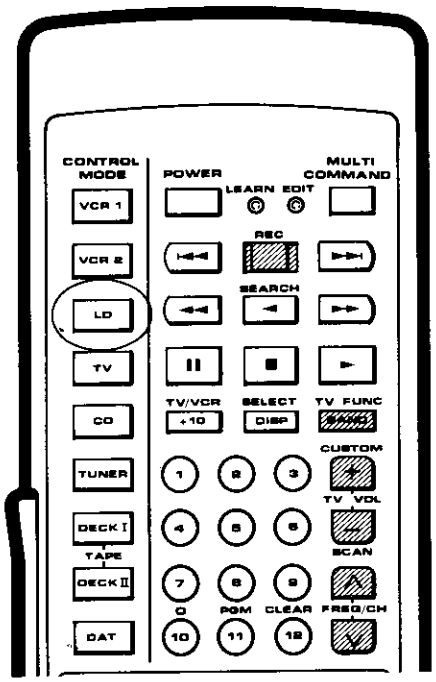
DISP (DISPLAY) button:
Switches TV screen display ON/OFF.

1—12 buttons:
Use to call up channels.

CH ∧ button:
Shifts channels in ascending order.

CH ∨ button:
Shifts channels in descending order.

LD player operation



POWER button:
Switches LD player power ON/OFF.

⏮ **(CHAPTER SKIP) button:**
Searches for the start of the chapter playing.

⏭ **(CHAPTER SKIP) button:**
Searches for the start of the next chapter.

SEARCH button:
Used for the search operation and for the memory repeat operation.

◄◄ **(SCAN) button:**
Selects fast backward.

►► **(SCAN) button:**
Selects fast forward.

❚❚ **(PAUSE) button:**
Video and audio are stopped and playback is paused.

■ **(STOP/EJECT) button:**
Playback is stopped when pressed once. Pressing again causes the disc tray to come out.

► **(PLAY) button:**
Selects playback.

+10 button:
Use to input such information as chapter numbers higher than 10.

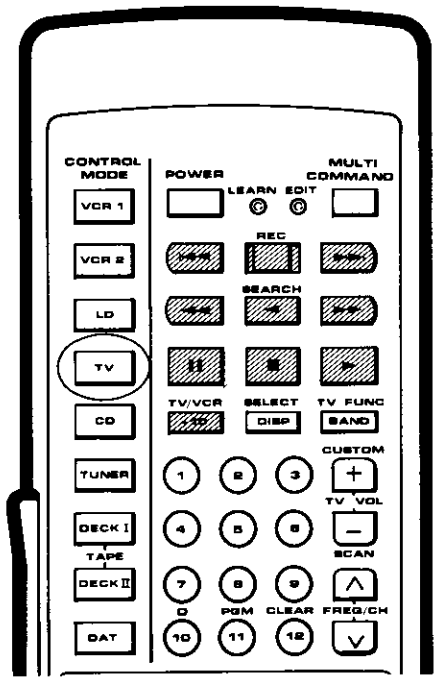
DISP (DISPLAY) button:
Switches TV screen display of chapter, frame/time number ON/OFF.

1—10 buttons:
Used for chapter and frame/time number search and for chapter program play.

PGM (PROGRAM) button:
Allows use of chapter program play.

CLEAR button:
Used for releasing repeat playback, number correction and mode release during search operation, and for releasing chapter program play.

TV operation



POWER button:
Switches the power of the TV ON/OFF.

DISP (DISPLAY) button:
TV image display ON/OFF.

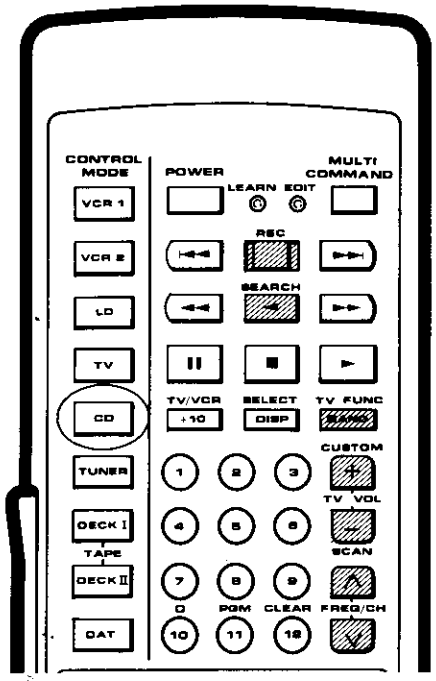
TV FUNC (TV FUNCTION) button:
Used to change the TV FUNCTION.
• The TV FUNC button cannot be used with some Pioneer TVs.

1—12 buttons:
Used to call up channels.

TV VOL (+, −) buttons:
Raises and lowers the volume.

CH ∧, ∨ buttons:
Changes the channel in the direction of larger (∧) and smaller (∨) channel numbers.

CD player operation



POWER button:
Switches CD player power ON/OFF.

⏮ **(TRACK SEARCH) button:**
Returns to the beginning of the track currently playing.

⏭ **(TRACK SEARCH) button:**
Advances to the next track.

◀◀ **(MANUAL SEARCH) button:**
Selects fast backward.

▶▶ **(MANUAL SEARCH) button:**
Selects fast forward.

⏸ **(PAUSE) button:**
Pauses playback.

■ **(STOP) button:**
Stops playback.

▶ **(PLAY) button:**
Selects playback.

+10 button:
Use when selecting a track number higher than 10. For example, to select 21, press the [+10] button twice and then the [1] button. This button cannot be used with some CD players.

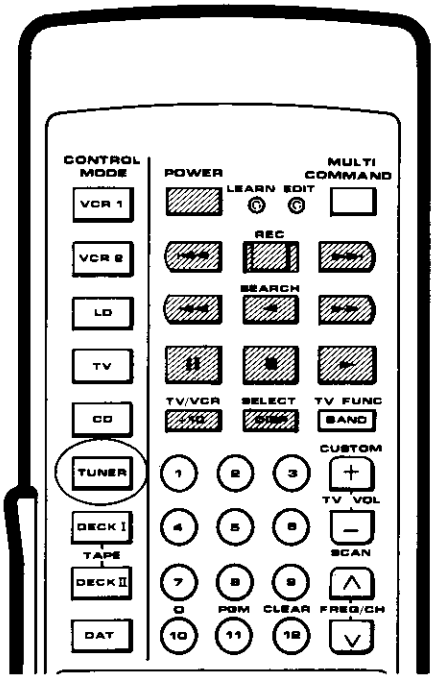
SELECT button:
Selects the DISC No. (1 to 6) for Multi-play CD players.

1—10 buttons:
For direct selection of a track or programming of tracks.

PGM (PROGRAM) button:
Press to program the CD player.

CLEAR button:
Erases a memorized program.

Tuner operation



1—12 buttons:
For recall of tuner presets.
Buttons 1 to 10 are used for the tuner.

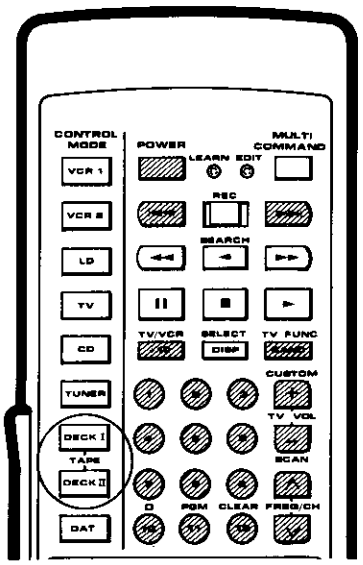
BAND button:
Switches the FM and AM bands in turn.

CUSTOM button:
Press when you want to recall a custom memory genre name.

SCAN button:
Press when you want to operate memory scan.
If you press this button after pressing the CUSTOM button to display custom memory genre names, such as ROCK and JAZZ, the STATION CALL NO.s of the selected genre name will be scanned.

FREQ ∧, ∨ buttons:
Shifts the frequency up (∧) and down (∨).

DECK I, II operation



For a double cassette deck, use the CONTROL MODE to select which to operate, DECK I or DECK II, then press the control buttons. When using a single cassette deck, select DECK II.

REC (REC) button:
Selects the recording or recording standby mode.

◄◄, ►► (FF) buttons:
Rapidly advances the tape in the direction of the arrow.

◄ (PLAY) button:
Selects reverse playback.

❚❚ (PAUSE) button:
Temporarily stops tape transport. Press again to resume tape transport.

■ (STOP) button:
Stops the tape transport.

► (PLAY) button:
Selects forward playback.

SELECT button:
Selects the cassette No. (1 to 6) for multi-cassette changer.

DAT (Digital Audio Tape deck) operation

POWER:
Switches DAT deck power ON/OFF.

REC (REC): Selects the recording mode.

◄◄ (REW): Rewind.

►► (FF): Fast forward.

❚❚ (PAUSE): Temporarily stops tape transport. Press again to resume tape transport.

■ (STOP): Stops the tape transport.

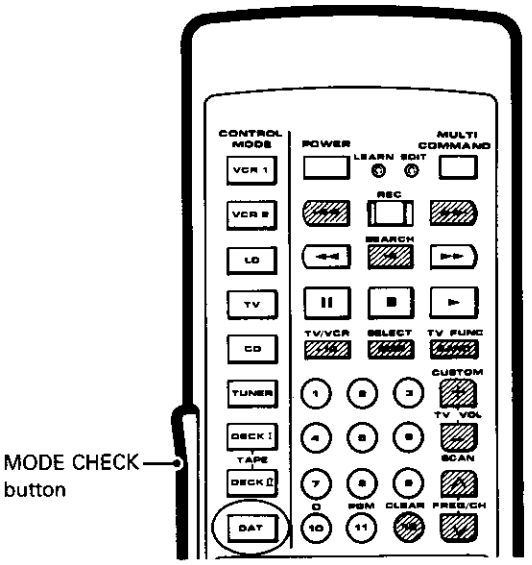
► (PLAY): Playback.

1—10: 1 to 10: Use to input numbers.

PGM: Use to playback a program.

MODE CHECK button

When you press the MODE CHECK button, the button for the present CONTROL MODE (for example, LD) lights. If you continue pressing the button, the CONTROL MODE changes in sequence.



PROGRAMMING

The LEARN mode and the EDIT mode are available for programming.
In the EDIT MODE, there is a MULTI-EDIT mode.

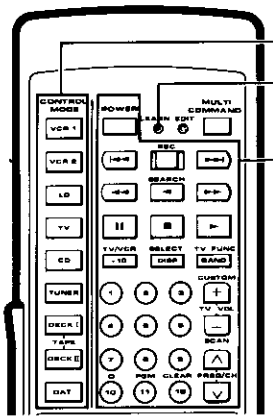
- **LEARN MODE:** In each CONTROL MODE, a single remote control signal can be input into each of the operation buttons.
- **EDIT MODE**
  MULTI-EDIT MODE: Input up to seven commands into the MULTI COMMAND button, and transmit the sequence of commands at the push of a single button.

LEARN

This system's remote control can "learn" the commands of other remote control units, regardless of manufacturer, as long as the other unit is of the infrared type.
On rare occasions, programming this unit may be impossible with some special types of infrared remote control units.
In some cases you may still need the original remote control unit for special situations. But as a rule, you will be able to use this Pioneer remote control for most system control needs, including video as well as audio equipment.

Learning capacity and buttons that can learn

The buttons shown in the diagram can learn. By changing the CONTROL MODE, a single button can be used to learn a maximum of nine commands, enabling a total of 261 commands to be learned. However, the capacity for learning differs depending on the remote control signal. With Pioneer remote control signals, about 50—100 commands can be learned. Only 50 or fewer commands can be learned from certain manufacturers' remote controls due to special remote control codes they may use.



[Learning procedure]

1. **Press the LEARN button to switch to the LEARN mode.**
2. **Press one of the CONTROL MODE buttons.**
3. **Press one of the Learning function buttons.**
4. **Receive the same remote control signal twice from another remote control and learn.**

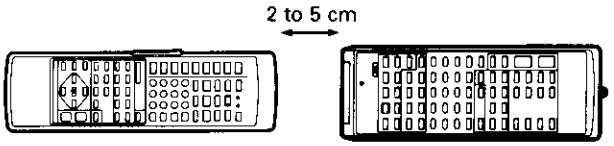
[Operation example]

As a learning example, an explanation follows on how to use the CONTROL MODE VCR 1 [▷] button to learn the VCR PLAY signal.

Place the transmission sections of the programmable remote control unit and the remote control of the VCR facing each other.

NOTE:

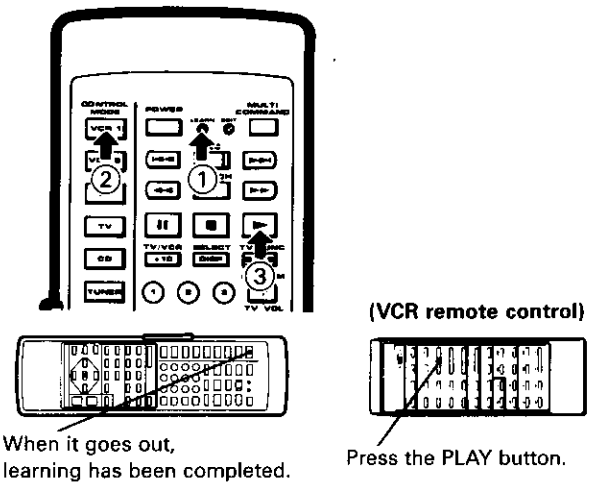
Be sure to place the remotes on a stable surface such as a table while doing this. Also, avoid placing near fluorescent lighting fixtures or in direct sunlight. When programing operations, use new batteries.



Place the two units on a table, separated by 2 to 5 cm. Memorization will not be possible if they are too close.

1. **Press the LEARN button.**
   - All the CONTROL MODE buttons flash at random.
2. **Press the VCR 1 CONTROL MODE button.**
   - Only the VCR 1 button flashes.
3. **Press the [▷] button.**
   - The VCR 1 button goes out, and lights after about one second. If you perform procedure 4 before the VCR 1 button lights, correct learning is not possible, so be sure to confirm that the button is lit.
4. **Continue by pressing the PLAY button on the VCR remote control.**
   - After the VCR 1 button has gone out, release the PLAY button. Wait for the VCR 1 button to light again.
5. **Press the PLAY button on the VCR remote control once more.**
   - When learning is completed, the VCR 1 button goes out, and all the CONTROL MODE buttons flash at random. The VCR 1 [▷] button has learned the new signal.
     When performing procedures 4 and 5, if you press the VCR [▷] button twice, or move the remote control, correct learning is not possible.

To continue learning with other buttons, continue from procedure 2.



To end the learning operation, press the LEARN button.

[When learning is not possible]

After the selected CONTROL MODE button (for example VCR 1) flashes twice, and all the CONTROL MODE buttons flash, repeat the learning operation from procedure 2.

[When learning is not possible because memory is full]

After the selected CONTROL MODE button (for example VCR 1) flashes four times, the LEARN MODE is canceled.

If the memory becomes full even when you have used only a small number of buttons for learning, take the following steps.

- **Try learning once more using the button that resulted in full memory.**

Memory may appear to be full even when it is not due to the two remote controls being too far apart, not enough power remaining in the batteries, or the effect of light from fluorescent lighting fixtures or direct sunlight.

- **Check buttons already used for learning.**

If the CONTROL MODE button remains lit after you have quickly pressed and released a button used for learning, memorization in that button is incorrect, resulting in the memory full condition. If you perform learning once more, abnormal data is cleared, returning you to normal conditions.

NOTE:

- *After pressing the LEARN button, if you do not press a button within about 30 seconds, the LEARN MODE is canceled.*
- *After pressing one CONTROL MODE button, if you do not press a button that can learn within about 30 seconds, the LEARN MODE is canceled. If a button other than one that can learn is pressed, the condition for CONTROL MODE button input is resumed.*
- *After pressing an operation button that can learn, if a remote control signal is not received within 45 seconds, the LEARN MODE is canceled.*

EDIT

MULTI-EDIT MODE

A maximum of seven commands can be programmed into MULTI COMMAND button. This enables a series of signals to be transmitted simply by pushing the MULTI COMMAND button.

(Example) Programming the following four commands into the MULTI COMMAND button.
① AMP POWER
② AMPLIFIER FUNCTION CD
③ CD POWER
④ CD PLAY (►)

1. **Press the EDIT button. (Switches to the EDIT mode).**
   • The CONTROL MODE buttons light one after the other and then flash at random.
2. **Press the MULTI COMMAND button. (Switches to the MULTI-EDIT mode).**
   • The CONTROL MODE buttons flash at random.
3. **Press the AMP POWER button.**
   • The CONTROL MODE buttons go out, and then flash at random. (Registration is completed).
4. **Press the CD input selector button.**
   • The CONTROL MODE buttons go out, and then flash at random. (Registration is completed).
5. **Press the CD CONTROL MODE button.**
   • The CD button flashes.
6. **Press the CD POWER.**
   • The CD button goes out, and then the CONTROL MODE buttons flash at random. (Registration is completed).
7. **Press the CD CONTROL MODE button.**
   • The CD button flashes.
8. **Press the PLAY (►) button.**
   • The CD button goes out, and then the CONTROL MODE buttons flash at random. (Registration is completed).
9. **Press the MULTI COMMAND button.**
   • The CONTROL MODE buttons light one after the other and then flash at random. (This means that registration has been completed).
10. **Press the EDIT button.**
    • The EDIT mode is canceled.

If you press the MULTI COMMAND button, these remote control signals are transmitted in the order programmed, so if CONTROL IN/OUT is connected (refer to page 13), and if remote control signals can reach both the amplifier and CD player sensor windows, power to the amplifier switches on, power to the CD player switches on, the input selector switches to CD, and the CD player starts playing.

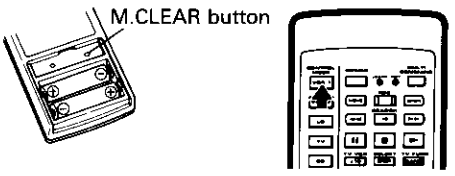
NOTE:

- *After pressing the seventh command, the MULTI-EDIT mode is registered automatically (the CONTROL MODE buttons light one after the other and then flash at random), but the EDIT mode is not canceled. To cancel the EDIT mode, press the EDIT button.*
- *After memorizing six or less commands, if you cancel the EDIT mode without pressing the MULTI COMMAND button again, all the registered commands are cleared, leaving the previous commands as they were.*
- *If a button is for transmission, even if it is not an operation button in the selected CONTROL MODE, registration is still possible. (Buttons such as the VCR 1 ⏮.)*
  In this case, during signal transmission, the CONTROL MODE button momentarily lights, but the remote control code is not transmitted.
- *If the component to be operated is installed at a distance, if there is an obstacle between a specific component sensor window and the remote control, or if component operation speeds are very different, MULTI-COMMAND operation may be incorrect. When repeating operations, first return to the initial settings for each component. For operations such as power ON/OFF, if components are switched ON, they can be switched OFF by transmitting a signal.*

RETURNING TO THE INITIAL SETTINGS

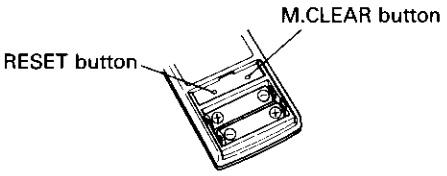
Initialization of particular CONTROL MODES

1. **Remove the battery compartment cover.**
2. **While pressing the M.CLEAR button inside the cover, press the button for the CONTROL MODE (for example VCR 1) you want to initialize.**
   • For example, if you initialize VCR 1 using the method mentioned above, the CONTROL MODE button lights for about one second, and the VCR 1 operation buttons are initialized.



Initializing the entire memory

1. **Remove the battery compartment cover.**
2. **While pressing the M.CLEAR button inside the cover, press the RESET button.**
   • Do not release the M.CLEAR button before releasing the RESET button. While pressing the M.CLEAR button, press the RESET button, and quickly release.
   Initialization is not possible if the buttons are pressed in the reverse order.
   • All the CONTROL MODE operation buttons are initialized, and data in the MULTI COMMAND button is cleared.



TROUBLESHOOTING

Incorrect operation is often mistaken for equipment malfunction. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Investigate the other components and electrical appliances being used.
If the trouble cannot be rectified even after exercising the checks listed below, ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

Symptom	Cause	Remedy
Power does not come on even when POWER switch is pressed.	• Power cord is disconnected. • Instances are rare, but the problem may be due to the operation of the protector circuit.	• Connect cord securely. • Unplug the power cord of the unit from the AC wall outlet, then plug it in again.
Control it not possible regardless of what operation button it pressed.	• Static electricity affected the unit when the air is dry, such as in winter.	• Unplug the power cord of the unit from the AC wall outlet, then plug it in again. • If static electricity is pronounced, it is recommended that you operate the unit using the remote control unit.
No sound is produced, even when the input selector button is selected.	• Connections are incorrect.	• Consult pages 6 — 11 and perform connections correctly.
	• The MUTING button is pressed.	• Press the MUTING button to cancel the MUTING effect.
	• VOLUME is turned down.	• Raise volume.
	• Speaker connecting wires are disconnected from speaker terminals.	• Connect wires to terminals securely.
	• One or both of the input cords are disconnected.	• Connect input cords securely.
	• TAPE 2 MONITOR button is in the ON position.	• Press the button again to the OFF position.
	• The SPEAKERS button is OFF.	• Switch the SPEAKERS button ON.
No picture is produced, even when the input selector button is selected.	• Connections are incorrect.	• Consult pages 6 — 11 and perform connections correctly.
	• The VIDEO SIGNAL SELECTOR is not set properly.	• Set correctly.
	• The VCR and the selected input selector button are not correct.	• Press the correct button.
TV source can't be seen when the VCR's TV tuner is used.	• TV antenna is not connected to VCR, or connections are faulty.	• Consult the VCR's operating instructions, and connect antenna correctly.
	• You are attempting to watch a TV source using a VCR with copy system connections. In general, when copy system connections are made, the VCR's TV tuner function ceases to operate. For details, consult the operating instructions for your VCR.	• Disconnect the copy system connection (TV tuner function will operate).
Video tape copies can't be made with the VCR.	• Video tape copy connections haven't been made.	• Look again closely at the section VIDEO SYSTEM CONNECTIONS on page 7, and connect correctly.
No rear sound is produced.	• The SURROUND MODE switch is set incorrectly.	• Set correctly.
	• The REAR LEVEL is turned down.	• Adjust the rear level with the remote control unit's REAR LEVEL buttons.
	• Speaker connecting wires are disconnected from REAR SPEAKERS terminals.	• Connect wires to terminals securely.
Remote control does not work.	• Batteries are dead or no batteries in remote control unit.	• Insert new batteries.
	• Poor angle or too great a distance from the remote sensor window.	• Use within seven meters and within a 30 degree angle of the remote sensor window.
	• There is an obstacle between you and the remote sensor window.	• Change your position or move the obstacle.
	• A fluorescent light is shining on the remote sensor window.	• Move so fluorescent light does not shine directly on amplifier front panel remote sensor window.
	• CONTROL MODE is not set for the component you want to operate.	• Select the correct CONTROL MODE button and press.
	• You are pressing a button that does not transmit a signal.	• Refer once more to page 21 and after, press a button that transmits a signal.

Abnormal functioning of this unit may be caused by lightning, static electricity, or other external interference. To restore normal operation, turn the power off and then on again, or unplug the AC power cord and then plug it in again.

SPECIFICATIONS

Amplifier Section

Continuous power output
  Stereo .... 55 W + 55 W (8 Ω, 20 Hz — 20,000 Hz, T.H.D. 0.05 %)
  1 kHz (DIN) ..... 100 W + 100 W (4 Ω)
Continuous power output (DIN: 1 kHz, T.H.D. 1 %)
  (Front and center driven)
  Front ..... 55 W + 55 W (4 Ω)
  Center ..... 55 W (4 Ω)
  Rear ..... 20 W + 20 W (8 Ω)
Dynamic Power (2 Ω/4 Ω/8 Ω) ..... 145 W/125 W/85 W
Total Harmonic Distortion (Front)
  (20 Hz — 20,000 Hz, 8 Ω, continuous rated power output) ..... 0.05 %
Input (Sensitivity/Impedance)
  PHONO MM ..... 2.5 mV/47 kΩ
  CD, TAPE 1/DAT, TAPE 2, TUNER, LD,
  VCR 1, VCR 2, TV, VIDEO ..... 150 mV/47 kΩ
Phono Overload Level (T.H.D. 0.1 %, 1 kHz)*
  PHONO MM ..... 130 mV
Frequency Response
  PHONO MM ..... 20 Hz — 20,000 Hz ±0.3 dB
  CD, TAPE 1/DAT, TAPE 2, TUNER, LD,
  VCR 1, VCR 2, TV, VIDEO ..... 5 Hz to 80,000 Hz $^{+0}_{-3}$ dB
Output (Level/Impedance)
  TAPE 1/DAT REC, TAPE 2 REC ..... 150 mV/2.2 kΩ
  VCR 1 OUT, VCR 2 OUT ..... 150 mV/2.2 kΩ
  PRE OUT ..... 1 V/2.2 kΩ
Tone Control
  BASS ..... ±8 dB (100 Hz)
  TREBLE ..... ±8 dB (10 kHz)
Muting ..... −∞
Loudness Contour ..... 6 dB (100 Hz)
  3 dB (10 kHz)
Signal-to-Noise Ratio (IHF, short circuited, A network)
  PHONO MM ..... 79 dB
  CD, TAPE 1/DAT, TAPE 2, TUNER, LD,
  VCR 1, VCR 2, TV, VIDEO ..... 97 dB
Signal-to-Noise Ratio (DIN: continuous rated power output/ 50 mW)
  PHONO MM ..... 69 dB/57 dB
  CD, TUNER, AUX, TAPE, VCR ..... 86 dB/59 dB

Measured by Audio Spectrum Analyzer.

VIDEO Section

Input (Sensitivity/Impedance)
  VCR 1, VCR 2, LD, TV, VIDEO ..... 1 Vp-p/75 Ω
Output (Level/Impedance)
  VCR 1, VCR 2, MONITOR ..... 1 Vp-p/75 Ω
Frequency Response
  VCR 1, VCR 2, LD, TV, VIDEO → MONITOR .... 5 Hz — 10 MHz $^{+0}_{-3}$ dB
Signal-to-Noise Ratio ..... 60 dB

S-VIDEO Section

Input (Sensitivity/Impedance)
  LD, VIDEO, VCR 1 ..... 1 Vp-p/75 Ω (Luminance Signal)
  0.286 Vp-p/75 Ω (Color Signal)
Output (Level/Impedance)
  VCR 1, MONITOR ..... 1 Vp-p/75 Ω (Luminance Signal)
  0.286 Vp-p/75 Ω (Color Signal)
Frequency Response
  LD, VCR 1 → MONITOR ..... 5 Hz — 10 MHz $^{+0}_{-3}$ dB
Signal to Noise Ratio ..... 60 dB

Surround Section

Rear Frequency Response ..... 30 Hz — 7,000 Hz $^{+0}_{-3}$ dB
Delay Time (DOLBY PRO LOGIC SURROUND)
  Variable range ..... 16 ms — 30 ms
  Step ..... 2 ms

Miscellaneous

Power requirements ..... a.c. 240 Volts ~, 50/60 Hz
Power consumption ..... 600 W
Dimensions ..... 420 (W) x 162 (H) x 417 (D) mm
Weight (without package) ..... 10.4 kg

Furnished Parts

Remote control unit 1
Dry cell batteries
  (size "AA" (IEC LR6/AM-3) Alkaline) 2
Operating Instructions 1

NOTE:
Specifications and the design are subject to possible modifications without notice due to improvements.

MAINTENANCE OF EXTERNAL SURFACES

- Use a polishing cloth or dry cloth to wipe off dust and dirt.
- When the surfaces are very dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water, and wrung out well, and then wipe again with a dry cloth. Do not use furniture wax or cleaners.
- Never use thinners, benzene, insecticide sprays and other chemicals on or near this unit, since these will corrode the surfaces.

POWER-CORD CAUTION

Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc., on the power cord, or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed such that they are not likely to be stepped on. A damaged power cord can cause fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask your nearest PIONEER authorized service center or your dealer for a replacement.

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